

BAB VI

KESIMPULAN DAN SARAN

6.1 Kesimpulan

Setelah melakukan analisis data dan perencanaan Instalasi Pengolahan Air Limbah *Leachate* Tempat Pembuangan Akhir Piyungan Yogyakarta, dapat diambil beberapa kesimpulan:

1. Berdasarkan daerah tangkapan air hujan, Tempat Pembuangan Akhir Piyungan Yogyakarta dipengaruhi oleh stasiun Terong.
2. Hujan rencana harian untuk periode ulang 2 tahunan sebesar 68,7385 mm; 5 tahunan sebesar 82,5468 mm; 10 tahunan 89,2894 mm; dan 25 tahunan sebesar 95,918 mm.
3. Sistem drainase yang digunakan adalah sistem drainase bawah permukaan, dengan ketinggian 60 cm, dan jarak antar pipa adalah sebesar 10 m.
4. Dimensi pipa drainase *leachate* yang digunakan adalah: untuk pipa A berdiameter 1½" (48 mm), pipa B-B berdiameter 4" (114 mm), dan pipa 1-1 berdiameter 8" (216 mm).
5. Debit *leachate* yang dihasilkan oleh Tempat Pembuangan Akhir Piyungan Yogyakarta seluas 10 Ha adalah sebesar $2,713 \times 10^{-3} \text{ m}^3/\text{dt}$ atau sebesar 2,713 l/dt.
6. Dalam perencanaan bak instalasi pengolahan air limbah, dimensi yang digunakan untuk bak anaerob adalah panjang: 55 m, lebar: 35 m, tinggi: 4,5 m; bak fakultatif panjang: 33 m, lebar: 35 m, tinggi: 2,8 m; bak maturasi panjang:

67 m, lebar: 35 m, tinggi: 1,3 m; bak biofilter panjang: 21 m, lebar: 17 m, tinggi: 2,3 m; dan kolam lumpur panjang: 14 m, lebar: 10 m, tinggi: 1,3 m. Untuk tebal pelat dan dinding sama untuk semua bak, yaitu tebal pelat 0,5 m dan tebal dinding 0,3 m.

6.2 Saran

Saran-saran yang dapat diberikan penulis dari hasil penyusunan Tugas Akhir ini, tercantum sebagai berikut:.

1. Perencanaan instalasi pengolahan air limbah *leachate* adalah suatu hal yang sangat kompleks. Selain menghitung debit *leachate* yang dihasilkan dan merencanakan dimensi bak, perlu juga diperhatikan proses pengolahan *leachate* serta sarana yang dibutuhkan untuk menunjang proses pengolahan *leachate* di dalam masing-masing bak, sehingga air buangan yang dihasilkan sesuai dengan standar baku air buangan.
2. Dalam merencanakan pipa drainase, perlu mempertimbangkan ketebalan pipa yang akan digunakan agar pipa tidak pecah selama umur rencana TPA.
3. Dalam menghitung debit *leachate*, perlu mempertimbangkan faktor tinggi sampah yang akan dibuang di atas sistem drainase agar pipa drainase dapat bekerja secara maksimal.
4. Dalam perencanaan analisis stabilitas bak sebagai dinding penahan tanah, perlu diketahui data yang akurat mengenai daya dukung tanah, untuk mengetahui apakah tanah bisa menahan beban yang terjadi di atasnya.

DAFTAR PUSTAKA

- Alea, 2009, *Mekanisme Masuknya Air Lindi ke Air Tanah*, diakses 11 Agustus 2010, <http://unalea.blogspot.com/2009/03/mechanisme-masuknya-air-lindi-ke-air.html>
- Cahyana, G.H, 2010, *Kolam Stabilisasi*, diakses 10 Januari 2011, <http://gedehace.blogspot.com/2010/02/kolam-stabilisasi.html>
- Said, N.I, 2010, *Teknologi Pengolahan Air Limbah Rumah Sakit Dengan Sistem Biofilter Anaerob-Aerob*, diakses 10 Januari 2011, <http://www.kelair.bppt.go.id/Sitpa/Artikel/Limbahrs/limbahrs.html>
- Harto, Sri, 1983, *Mengenal Dasar Hidrologi Terapan*, Biro Penerbit Keluarga Mahasiswa Teknik Sipil Universitas Gajah Mada, Yogyakarta.
- Peraturan Menteri Kesehatan Republik Indonesia, 1977, *Pengawasan Pencemaran Air dari Badan Air untuk Berbagai Kegunaan yang Berhubungan dengan Kesehatan*.
- Soewarno, 1995, *Hidrologi: Aplikasi Metode Statistik untuk Analisa Data Jilid 1 dan 2*, Nova, Bandung.
- Sugiharto, 2008, *Dasar-Dasar Pengelolaan Air Limbah*, Universitas Indonesia, Jakarta.
- Suripin, 2004, *Sistem Drainase Perkotaan yang Berkelanjutan*, Andi Offset, Yogyakarta.
- Suryolelono, K.B, 1993, *Teknik Fondasi Bagian I*, Nafiri, Yogyakarta.
- Tjokrokusumo, 1999, *Pengantar Enjiniring Lingkungan Jilid 2 dan 3*, Sekolah Tinggi Teknik Lingkungan, Yogyakarta.
- Triatmodjo, Bambang, 1993, *Hidrolika I*, Beta Offset, Yogyakarta.
- Triatmodjo, Bambang, 2008, *Hidrolika II*, Beta Offset, Yogyakarta.
- Triatmodjo, Bambang, 2006, *Hidrologi Terapan*, Beta Offset, Yogyakarta.



LAMPIRAN



LEMBAR ASISTENSI TUGAS AKHIR

Nama : Simplisius Prima Narendra
NPM : 07 02 12826 / TS
Dosen Pembimbing : Anastasia Yunika, S. T, M. Eng
Judul Tugas Akhir : Perencanaan Instalasi Pengolahan Air Limbah
Leachate Tempat Pembuangan Akhir
Piyungan Yogyakarta

No	Tanggal	Keterangan	Paraf Dosen
1	23/8 - 2010	Konsultasi judul tugas akhir & topik	ay
2.	7/9 - 2010	Revisi proposal tugas akhir.	ay
3.	17/9 - 2010	ACC proposal tugas akhir.	ay
4.	8/10 - 2010	ACC revisi proposal setelah diseminarkan.	ay
5.	26/10 - 2010	ACC hasil uji statistik, revisi urutan penulisan pengujian statistik.	ay
6.	3/11 - 2010	ACC bab I, II, IV. Revisi bab III dan V	ay
7	30/11/2010	Data screening & uji kebaikannya belum mengikuti 6 langkah & trial & error pustaka / landasan teori → tgs & analisis OK Gb & tabel hrs disebut dlm Fkrs.	ay
8	11/1/2011	① Cek $V = \text{kapasitas infiltrasi} / \text{tk infiltrasi} \times \text{koef. permeabilitas}$ ② Dimensi bak berdasarkan debit pipa → cek ③ lanjut ke desain IPAL	ay



No	Tanggal	Keterangan	Paraf Dosen
	1/2/2011	cek desain kolam tld cracking MT BAK fakultatif MT digambarkan cek lentur ponding → patah? tensuran	
	10/2/2011	Gambar teknis IPAL Gambar situasi IPAL lengkapi draft 2 sd. Abstrak	
	11/2/2011	All % landasan	

Tahun 1985

Tanggal	Bulan											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sep	Okt	Nop	Des
1	0	0	0	0	0	30	0	0	0	0	2.4	0
2	2	0	0	0	3.3	0	0	0	0	0	0	6.4
3	0	0	0	11	0	50	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	2	0	0
5	0	40.5	0	0	0	0	0	0	0	0	0	0
6	30	0	0	0	0	12.4	0	0	0	0	0	7.9
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	30	0	0	4.2	0	0	0	0	0	10.5	0
9	0	0	0	0	0	0	0	9.8	0	0	0	0
10	20	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	65	0	0	0	0	0	0	0	0
12	0	75	0	0	0	0	0	0	0	0	0	0
13	20	0	0	0	0	0	0	0	0	0	0	7
14	0	0	0	13	0	0	0	0	0	0	0	0
15	5	0	0	0	0	0	0	0	0	0	10.1	0
16	0	21	0	20	0	0	0	7.5	0	0	0	0
17	15	0	0	0	12.5	0	0	0	20	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	50	0	0	0	0	0	0	0	0	3.5	2.5
20	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	25.5	49	0	0	0	0	0	4.5	0	9	5.8	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	16.7	0	0	0	0	70.2	0	0	0	2.3	0	3.8
25	0	0	0	0	0	0	0	0	0	6.3	0	0
26	0	0	0	0	0	0	0	0	0	5.6	0	0
27	40	10	0	0	0	5	0	0	0	0	6.9	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0		0	0	0	0	0	0	0	0	3.5	0
30	0		0	0	0	0	0	20	0	0	0	0
31	30.2		0		0		0	0		0		0

Tahun 1986

Tanggal	Bulan											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sep	Okt	Nop	Des
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	2	0	0
3	1.5	0	0	0	0	0	0	0	0	1	0	0
4	0	0	0	0	0	2.3	8.5	0	0	0	0	0
5	6	0	0	2.3	0	0	0	0	0	0	0	4
6	0	2.5	0	0	0	0	0	0	0	0	0	0
7	0	2	3.2	0	0	1.1	0	0	0	0	0	0
8	0	0	0	0	2.1	0	0	0	1	0	0	0
9	6	2	3	0	0	0	0	0	0	0	0	0
10	0	0	4.3	0	0	7.5	2	0	0	1	0	0
11	0	3	3.6	0	0	0	0	0	6	0	0	0
12	0	0	0	3.4	0	0	0	0	0	2	0	8
13	6	3	0	0	0	7.7	0	0	4	0	0	0
14	0	0	9.3	0	0	0	0	0	0	0	0	0
15	0	4	0	2.3	1.6	0	0	1	0	0	0	5
16	0	0	13.3	0	0	0	0	0	3	0	0	7
17	0	42	2	0	0	0	0	0	0	1	0	3
18	0	0	0	2	0	0	0	0	0	0	0	4
19	0	5.9	2.3	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	5.6	0	0	0	0	0	1
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	1	2	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	5.8	0	7	0	0	0	0	0	0	0	0	0
25	3.9	0	0	0.7	0	0	0	0	0	0	0	0
26	0	2.6	14.4	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	2.9	0	0	3	0	0	0
28	9.7	0	1.6	0	0	0	0	0	0	0	0	0
29	0		7.3	0	0	0	0	4	0	0	0	3.6
30	0		0	0	2	0	0	0	0	0	0	0
31	3.6		0		0		0	0		2		0

Tahun 1987

Tanggal	Bulan											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sep	Okt	Nop	Des
1	3	4	0	0	0	0	0	0	0	0.0	0.0	29.1
2	5.6	0	3	0	0	0	0	0	0	0.0	0.0	28.2
3	0	3	0	0	0	0	0	0	0	0.0	0.0	0.0
4	6	0	3	0	0	0	0	0	0	0.0	0.0	0.3
5	7	0	0	0	0	0	0	0	0	0.0	0.0	3.2
6	5	2	0	0	0	0	0	0	0	0.0	0.0	45.7
7	0	0	0	0	0	0	0	0	0	0.0	3.2	31.2
8	2	0	0	0	0	0	0	1.5	0	0.0	0.0	28.8
9	0	8	0	0	0	0	0	2	0	0.0	0.0	0.0
10	3	1	0	0	0	0	0	0	0	0.0	0.0	17.3
11	6	0	0	0	0	0	0	0	0	0.0	4.5	7.4
12	1.6	0	1	0	0	0	0	0	0	0.0	0.0	18.2
13	7	0	3	0	0	0	0	0	0	0.0	0.0	21.2
14	0	1	0	0	0	0	0	0	0	0.0	0.0	12.9
15	0	0	0	0	0	0	0	0	0	0.0	0.0	37.0
16	0	0	0	0	0	0	0	0	0	0.0	0.0	11.3
17	2.5	1	0	0	0	0	0	0	0	0.0	0.0	8.1
18	0	0	0	0	0	0	0	0	0	0.0	0.0	9.4
19	0	0	4	0	0	0	0	0	0	0.0	0.0	39.6
20	0	0	3	0	0	0	0	0	0	0.0	9.4	4.4
21	7	0	0	0	0	0	0	0	0	0.0	2.6	1.2
22	0	8	0	0	0	0	0	0	0	0.0	4.5	25.1
23	0	1	0	0	0	0	0	0	0	0.0	24.7	62.5
24	1	0	0	0	0	0	0	0	0	0.0	0.0	50.1
25	6	1	0	0	0	0	0	0	0	0.0	19.2	26.1
26	7	0	0	0	0	0	0	0	0	0.0	25.7	9.1
27	4	0	4	0	0	0	0	0	0	0.0	7.7	2.3
28	0	0	6.7	0	0	0	0	0	0	0.0	0.3	1.9
29	7		7.6	0	0	0	0	0	0	0.0	0.0	0.0
30	4		6.5	0	0	0	0	0	0	0.9	14.0	0.0
31	0		6		0		0	0		0.0		0.0

Tahun 1988

Tanggal	Bulan											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sep	Okt	Nop	Des
1	1.6	1	6.7	1.7	0	0	0	0	0	0.1	1.6	1.5
2	1	26.3	7.4	8.6	13.1	0	0	0.3	0	0	0	1
3	1.3	19.9	3.7	0.6	0	0	0	1.3	0	0	0	0
4	7.2	81.3	13.7	0	0	0	0	3.1	0	0	0	0
5	1.4	39.2	24.9	0.8	6.5	0.8	0	17.2	2.1	0	0	0
6	1.4	2.5	9.1	1.4	4	3.3	0	0	0	0	0.1	0.3
7	1.4	11.2	5.9	0.2	15.6	2.9	0	0	0	0	0	0
8	1.5	20.3	12.2	0.1	0	0.3	0	0	0	0	0	0
9	1.2	21.2	4.1	0	24	33.9	0	0	0	0	6.3	0
10	4.7	65.3	6.2	5.3	10.9	1	0	0	0	0.2	12.8	0
11	1.2	58.2	7.4	1.2	16.1	0	0	0	0	0	14.5	0
12	23.8	26.1	7.7	0	35.3	0	0	0	0	0	3.7	1.2
13	33	17.6	8.9	0	5.4	0.8	0	0	0.1	38.5	10.5	13.9
14	6.7	3.8	10.7	0	21.9	1.1	0	0	0.1	12.6	11	0.9
15	18	3.9	1.5	2	11.7	5.6	0	0	1.7	15.6	24.1	10.9
16	23.5	2.7	0	1.7	0	2.4	0	0	0	23.4	1.6	5.7
17	3	1	0.2	11.8	0	0	0	0	0	6.9	0	21.9
18	2.8	0	0.8	5	0	7	0	0	0	10.1	0	24.1
19	5.6	0	25.8	0.3	2.3	0	0	0	0	8.4	1	19.5
20	10.3	0	2.7	0	0	0	0	0	0	3.5	0	41.5
21	14.7	0	16.9	0	39.1	0	0	0	0	10.6	1.2	15.6
22	3.5	24.3	7.9	0	9.1	0	0	0	0	1.5	5.1	5
23	21.5	15.6	16.9	0	3.1	0	3.2	0	0	3.7	6.9	4
24	16.7	29.6	21.9	0	8	0	0	0	0	7.8	34.6	0.2
25	6.4	2.6	13.2	0	0	0	0	0	0	0.6	16.2	6.5
26	5.1	21.4	17.8	0	0	0	0	0	0	1.2	2.7	3.7
27	19	19.9	13.4	0.3	3	0	0	0	0	2	1.4	2.2
28	6.4	8.4	2	0.3	11.2	0	0.4	0	0	3.7	4.7	1.1
29	3.4	14	25.5	5.4	0	0	0	0	0	25.1	7.4	5.5
30	2.4		16.2	0	0	0	0	0	0	25.1	0.9	0
31	0.8		13		1.9		0	0		4.1		0

Tahun 1989

Tanggal	Bulan											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sep	Okt	Nop	Des
1	5.9	18.2	15.3	2.6	2.1	30.9	0	0	0.1	0	5.3	5
2	10.5	10.1	6.9	19.4	0	10.1	0	0	0	0.3	4.6	0
3	17.7	44.6	19.1	6.8	0	4.1	0	12.8	0	0	6.9	1.6
4	8.9	6	15.8	6.4	0	3.1	0	2.6	0	0	15.1	6.2
5	4.1	29	7.9	2.8	3.1	0	0	12.7	0	0	4.7	0
6	14.6	21.2	14.1	1	0	0.6	0	4.1	0	0	8.7	0.1
7	16.5	9.2	7.3	29.1	0.5	1.1	34.1	6	0	0	0	2.8
8	1.3	1.7	0	0	0.4	0	14.5	0	0	0	16.8	16.4
9	0.6	8.9	25.6	0	0.3	0	0	4.9	0	0	43.6	15.4
10	13.7	1.8	9.9	0	0	16.3	0	0	0	0	11.7	0.6
11	6.5	7.4	5.4	4.8	6.9	13.2	0.3	0	0	0	1.9	1.8
12	12.3	7.5	1	3	6	17.4	0.3	0	0	0	0	8.1
13	4.6	27.1	16.5	0	1.1	32.8	0	0	0	0.6	1.5	26.6
14	0.4	14.1	4.7	0	0	17.8	0.3	0	0	1.4	12.7	1
15	11.4	2.5	19.6	0	0	11.1	0	0	0	26.9	15	0.2
16	0.3	14.9	6.4	0	0	7.8	2.9	0	2	18.9	1.6	0
17	3.7	11.6	0	0	0	2.1	10.4	0	0	0	0	0
18	5.5	0.8	0	0	0	0	72	0	0	0	2.5	0
19	0	0.5	0	0	0	1.5	19.7	0	0	0	0	0
20	0	3.4	2	2.8	0.9	3	1.6	0	0	0	0	0
21	15.6	3.9	0.5	1.4	0.2	0	0	0	0	0	0.9	0
22	4.2	8.8	0	2.9	2.3	0	1.2	0	0	0	0.3	4.5
23	0.6	2.6	0.1	0.8	3.2	1.6	8.3	0	0	0	0	4.1
24	1.9	12.2	4.3	0.1	7.4	0	8.1	0	0	0	0	3.2
25	10.7	25.8	11.1	2	14.3	0	0.5	0	0	0	0	2.2
26	9.2	10.9	0.3	0	21.3	0	10	0	0	0	0	6.3
27	4	9	3.7	4.4	24.6	1.4	8.1	0	0	0	0.8	28.5
28	0	3	3.4	9.9	32.2	1.6	0	0	0	12.9	0.6	10.5
29	7.9		15.5	20.1	15.6	0	0	0	0	6.9	0.3	11.2
30	9.6		0	2.7	4.3	0	0	0.1	0	6.3	8.1	34.8
31	8.3		2		12.2		0	0		0.8		34.4

Data Curah Hujan Stasiun Terong

Tahun 1990

Tanggal	Bulan											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sep	Okt	Nop	Des
1	25.3	12.8	23.2	21.2	0	0	0	0	0	0	0	0
2	7.1	12.7	6.9	0	0	0	15.6	0	0	0	0	0
3	3	0	35.6	13.4	0.3	0	31.8	0	0	0	0	18.2
4	3.3	0	5.9	0	0	0.2	6.1	0	0	0	0	0
5	13.9	0	17.4	7.1	0	0	0	0	0	0	0	20.6
6	6	4.9	30.6	0.8	0	0	3.7	0	0	0	0	19.5
7	6.5	8.2	9.1	0	0	0	0	0	0	0	0	0
8	7.7	16.4	56.4	6	0	0	0	0	0	0	0	0
9	4.6	23.1	5.8	2.3	0	0.6	0	0	0	0	0	1.9
10	10	1.1	3.5	0	3.1	1.6	0	0	0	0	0	2.1
11	4	1	17.1	0	5.1	0	0	0	0	0	0	1.8
12	0	0	12.2	0	0.6	0	0	0.6	0	0	0	7.5
13	1.6	0	15.9	0	0	0	0	0	0	0	0	0
14	34.1	2.4	2.5	0	0	0	0	0	0	0	0	0
15	23.8	10.8	8.4	0	0	0	0	0	0	0	0	24
16	10.2	50.2	3	16	0.6	1	0	0	0	0	0	0
17	14.6	0.6	34.9	6.1	1.5	0	0.8	0	0	0	0	46
18	28.5	20.5	20	7.4	0	0	0	0	0	0	0	0
19	30.9	5.4	9.6	2.8	0	0	0.2	0	0	0	0	0
20	13.5	9	5.8	0.6	0.1	0	0	0	0	0	0	57
21	2.5	14.1	0	0	0	0	0	6.3	0	0	0	0
22	3.2	2.9	0	0.9	1	0.7	0	16.5	0	0	0	15
23	21.1	20.5	0	19.6	1.9	10.2	0.6	36.6	0	26	0.5	27.3
24	15.1	1.3	0	0	0	14.5	0	0	0	0	0	23.5
25	13.8	14.5	1	0.1	4.3	5	0	0	0	27.6	7.2	7.6
26	8.5	9.2	16.7	3.7	8.3	0.2	0	0	0	0	0	24
27	4.1	3.9	5	4.7	7.1	15	0	0	0	0	0.3	10.1
28	19.6	34.1	4.7	6.7	1.2	0	0	0	0	1.5	0	0
29	5.1		4.9	16.8	6.7	0	0	0	0	0	0	0
30	0		0	0	1.6	0	0	0	0	0	0	0
31	2		0		0		0	0		0		0

Tahun 1991

Tanggal	Bulan											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sep	Okt	Nop	Des
1	5.9	17.7	34.8	0	12.6	0	0	0	0	0	0	0
2	7.3	47.5	3.4	0	15.6	0	0	0	0	0.5	0	0
3	0	15.4	5	0	0	0	0	0	0	0	0	0
4	0.6	28.2	0	0	0	0	0	0	0	0	0	7
5	9.9	39	2.6	0	0	0	0	0	0	0	0	14.5
6	7	2.3	3.4	0	0	0	0	0	0	0	0	10.5
7	10.2	16.4	7	0	0	0	0	0	0	0	0	0
8	0	22.7	0	0	0	0	0	0	0	0	0	2
9	0	28.5	8.6	0	7.4	0	0	0	0	0	0	0
10	0	70.5	1.4	22	0	0	0	0	0	0	0	0
11	0	12.9	0	0	0	0	0	0	0	0	4	5
12	0	11	0	0	0	0	0	0	0	0	4	0
13	0	4.7	0	0	0	0	0	0	0	0	5	0
14	6.7	12.9	0	0	0	0	0	0	0	0	0	0
15	0	0.6	0	18.5	0	0	0	0	0	10.2	3.5	0
16	0	11	3.7	8.1	0	0	0	0	0	0	0	0
17	0.8	2.4	0	12.8	0	0	0	0	0	0	0	0
18	1.9	26.9	7.2	1	0	0	0	0	0	2	0	0
19	0	33.5	0	0.2	0	0	0	0	0	0	27	1
20	2.7	21.4	6.9	13.5	0	0	0	0	0	0	0	1
21	42.8	0.7	0	9.8	0	0	0	0	0	0	0	10
22	30.8	2.6	0	1.2	0	0	0	0	0	0	0	0
23	6	15.5	0	0	0	0	0	0	0.9	0	0	3
24	8.6	29	0	0	0	0	0	0	0	0	0	5
25	0	0	0	2	0	0	0	0	0	0	0	1.5
26	1.8	4	0	0	0	0	0	0	0	0	33	16
27	0.3	0	0	0.8	0	0	0	0	0	0	0	0
28	0.3	0	0	0	0	0	0	0	0	0	6.5	3
29	56.2		0	0	0	0	0	0	0	0	0	4
30	28		0	0	0	0	0	0	0	0	0	0
31	2.2		0		0		0	0		0		0

Tahun 1992

Tanggal	Bulan											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sep	Okt	Nop	Des
1	44	3	0	2	1.7	1	0	0	0	0	0	0
2	92	0	0	0	0	2	3	0	0	0	0	3
3	81	1.8	0	7	0	0	3	0	0	0	0	0
4	0	0	0	0	0	0	0	1	0	0	0	2
5	0	0	0	0	0	0	0	0	0	5	0	0
6	0	0	0	0	0	0	0	0	0	0	0	4.3
7	0	0	1.8	6.5	0	1.6	0	0	4	0	0	4.9
8	0	0	0	1	0	1	0	0	0	0	0	0
9	0	0	0	9	0	0	0	0	0	0	0	2
10	0	5.9	0	0	0	0	0	0	0	0	0	0
11	4.1	0	2.7	0	0	0	0	0	0	0	0	0
12	0	0	1.8	0	0	0	0	0	0	0	0	0
13	58	0	2	0	0	0	0	0	0	0	0	0
14	0	0	2.3	0	0	0	0	0	2	0	0	3.8
15	0	0	0	6.7	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	4.2	0
17	8	7	3.5	4.7	0	0	0	0	0	0	2.4	50
18	7	0	2	3	0	0	0	0	0	0	2	0
19	0	0	2	3.3	0	0	0	0	0	0	0	0
20	3.2	0	0	2	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	2.1
22	0	0	0	0	0	0	0	0	0	0	4.4	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	2	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	1.2	0	0	0	0	0	0	0
26	0	0	0	0	1.1	0	0	6	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	7.3	3	2.9	1	0	0	0	7	2.5	6.5	0	4.4
29	4	0	0	2	6	0	0	1.7	0	3	0	0
30	23		2.9	0	0	0	0	0	0	1	3.4	50
31	0		0		0		0	14.9		0		0

Data Curah Hujan Stasiun Terong

Tahun 1993

Tanggal	Bulan											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sep	Okt	Nop	Des
1	0	0.5	0	2.3	2.2	50	0	0	0	0	0	0
2	0	0	0.2	1	0	0	0	0	0	0	0	4.5
3	0	0	0	1	4.3	10	0	0	0	0	0	0
4	0	1.6	0	50.4	0	0.9	0	0	0	0	0	0
5	0	0.2	0	5.2	2.4	0	0	0	0	0	0	0
6	0	0	0	65.1	0	0	0	0	0	0	0	3
7	0	0	0	1.9	0	0	0	0	0	0	0	1.4
8	0	3.9	1.4	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0.7	80	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0.5	10	0	0	0	0	0
12	0	0	0	0.7	0	0	0	0	0	0	0	0
13	0	0	7	0	0	0	0	1.1	0	0	1.3	4
14	0	0	6.2	0	0	1.6	0	5	0	0	5.7	3
15	0	0	0	0	0	1.4	0	0	0	0	1.2	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	10	0	2	1.6	40	0	0	0	0	0	0	0
18	0	0	0	1.8	10	0	0	0	0	0	0	0
19	3	0	0	0	0	0	0	0	0	0	0	0
20	1	0	4.3	80	0	0	0	0	0	0	0	1.7
21	1	0	0	0	0	2	0	0	0	0	0	3.3
22	4	0	0	0	0	0	0	0	0	0	3.6	7
23	0	7	80	0	0.5	0	0	0	0	0	0	0.8
24	0	0	0	0	0.4	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	4	0	3.7
26	0	0.6	0	0	0	0	0	0	0	0	0	0
27	0	3.4	4	0	0	0	0	0	0	0	0	0
28	0	3.6	0	0	0	0	0	0	0	0	4	0
29	0		7	0	0	0	0	0	0	0	3.3	0
30	0		0	5.5	70	0	0	0	0	0	0	0
31	0		0		0		0	0		0		0

Data Curah Hujan Stasiun Terong

Tahun 1994

Tanggal	Bulan											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sep	Okt	Nop	Des
1	0	0	0	0	0	0	0	0	0	0	0	3.2
2	0	0	0	6.5	0	0	0	0	0	0	0.4	2.7
3	0	0	0.9	0	0	0	0	0	0	0	0	0
4	0	2.4	3.6	6.6	0	0	0	0	0	0	0.4	0
5	0	2.5	4.5	0	0	0	0	0	0	0	0	6.3
6	0	0.4	0	0	0	0	0	0	0	0	1	0
7	0	0	6.5	0	0	0	0	0	0	0	1	0
8	3	0	0.9	0	0	0	0	0	0	0	0	8.3
9	2	1.5	2	0	0	0	0	0	0	0	10	9.9
10	0	9.2	5	6	0	0	0	0	0	0	0	16.7
11	0	0.4	2	1	5.8	0	0	0	0	0	0	0
12	0	0	0.9	2.6	0	0	0	0	0	0	0	0
13	0	10.3	3.2	0	0	0	0	0	0	0	0	0
14	0	0	0	90	0	0	0	0	0	0	0	0
15	2.3	0	0	2.8	0	0	0	0	0	0	1.5	0
16	0	0	0	0	0	0	0	0	0	0	7	2
17	0	0.8	0	0	0	0	0	0	3	3	0	4
18	6.3	0.7	8	0	0	0	0	0	0	0	2	0
19	0	0	0	0	0	0	0	0	0	0	0	2
20	0	1.1	0	0	0	0	0	0	0	0	90	0
21	0	0	2	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	7	0	0.3	0	0	0	0	0	0	0	0	0
24	3.6	0	4	5.1	0	0	0	0	0	0	0	0
25	0	1.1	1.8	0	0	0	0	0	0	0	0	0
26	2.2	2	0	0	0	0	0	0	0	0	0	0
27	1.5	5	0	2.6	0	0	0	0	0	0	0	0
28	0	8	0	0	0	0	0	0	0	0	4	0
29	5.2		0	0	0	0	0	0	0	0	6.6	0
30	0		0	0.1	0	0	0	0	0	0	0	0
31	0		0		0		0	0		0		0

Data Curah Hujan Stasiun Terong

Tahun 1995

Tanggal	Bulan											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sep	Okt	Nop	Des
1	5.8	43.1	34.8	17.5	0	0	0	0	0	0	2	0
2	39.7	31	14.1	0	0	0	0	0	0	0	0	4
3	7.1	0	0	0	0	0	0	0	0	0	0	0
4	12.9	61.4	0	0	0	0	0	0	0	0	0	4
5	11.1	0	0	0	0	0	0	0	0	0	0	6
6	44.8	40.4	9.8	20	0	0	0	0	0	0	0	0
7	11.6	3.3	5.3	0	0	0	0	0	0	0	0	2
8	12.4	8.2	1.8	27.1	0	20	0	0	0	0	0	11
9	0.9	17.6	0	0	0	70.6	0	0	0	0	0	6
10	6.8	43	0	0	0	0	0	0	0	0	0	0
11	15.0	38	0	0	0	0	0	0	0	0.3	0	2
12	7.6	3.8	5.8	0	0	40.6	0	0	0	0	0	0
13	7.4	0	23	0	0	0	0	0	0	0.2	5	10
14	17.5	51.4	10	0	0	0	30.3	0	0	0	1	0
15	2.6	11	0	7.7	0	0	0	0	0	0	0	0
16	0.0	4.1	0	0	0	0	0	0	0	0	0	0
17	33.4	4	0	0	0	0	0	0	0	0	0	0
18	20.7	4.8	0	0	0	0	0	0	0	0	10	0
19	5.0	29	28	0	0	50.4	0	0	0	0	0	0
20	39.1	28	0	0	2.4	0	0	0	2.2	0	8	0
21	22.6	22.6	0	0	0	30.2	0	0	0	0	0	0
22	12.2	3.7	18	0	0	50	0	0	0	0	0	10
23	0.4	4.2	9.3	0	0	0	0	0	0	0	0	0
24	24.1	4.8	5	0	0	0	0	0	0	2.9	7	0
25	28.6	5.3	16	0	0	0	0	0	0	0	0	3
26	12.0	1.3	4	0	0	0	0	0	0	0	0	0
27	1.1	24.8	20	0	0	10	0	0	0	0.8	7	0
28	3.3	14.8	0	0	0	0	0	0	0	3.5	0	0
29	7.1		0	18.1	0	0	0	0	0	3.6	0	0
30	0.0		79.3	0.5	0	0	0	0	0	0	0	0
31	22.4		0		0		0	0		0		0

Data Curah Hujan Stasiun Terong

Tahun 1996

Tanggal	Bulan											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sep	Okt	Nop	Des
1	2.0	6.9	2.9	0.0	0.0	0.0	4.5	0.0	0.0	0.6	1.0	3.6
2	18.6	5.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	15.7	1.6	28.7
3	17.1	0.8	0.8	1.0	0.0	0.0	0.0	0.0	0.0	32.2	3.3	1.3
4	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4	0.0	1.5
5	8.3	1.3	3.6	0.0	0.0	0.0	0.0	0.0	0.0	14.6	2.0	32.1
6	6.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9	13.8
7	0.0	22.1	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	5.7
8	0.3	41.3	8.1	1.0	0.0	0.0	0.0	0.0	0.0	2.6	3.3	3.3
9	0.3	29.2	0.0	13.8	0.0	0.0	0.0	0.0	0.0	1.3	2.6	9.8
10	0.0	1.0	1.2	1.9	0.0	0.0	0.0	3.2	0.0	0.0	5.1	44.8
11	1.0	33.4	5.2	27.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.7
12	0.0	23.9	5.8	13.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	32.7
13	5.5	11.5	0.6	0.0	0.0	0.0	0.0	7.5	0.0	0.0	0.0	32.8
14	2.8	14.0	1.1	17.1	0.0	0.0	0.0	0.0	0.0	6.1	0.0	30.1
15	3.7	5.0	2.7	1.3	0.0	0.0	0.0	0.0	0.0	1.6	0.0	6.5
16	10.9	6.5	5.3	8.2	0.0	0.0	0.0	0.3	0.0	0.0	3.0	18.7
17	1.2	2.3	0.0	5.3	6.2	0.0	0.0	0.0	0.0	0.0	7.2	4.6
18	30.2	0.0	4.5	15.3	0.0	0.0	0.0	0.0	0.0	1.2	45.7	16.8
19	0.0	5.8	7.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	6.2	0.3
20	2.9	11.3	8.7	6.8	0.0	0.0	0.0	0.0	0.0	8.5	1.8	1.1
21	1.6	2.3	2.7	2.5	0.0	0.0	0.0	0.0	0.0	2.0	37.1	2.8
22	20.1	1.9	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	18.7	0.6
23	21.4	4.9	39.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	15.5	0.0
24	8.0	0.0	8.2	0.0	0.0	0.0	1.9	0.0	0.0	9.2	7.6	6.9
25	5.4	0.0	7.6	0.0	0.0	0.0	0.0	0.0	0.0	24.6	0.4	0.0
26	15.8	0.3	6.9	0.0	0.0	0.0	0.0	0.0	0.0	11.2	9.8	20.3
27	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2	0.0	7.3
28	3.0	2.7	5.8	0.0	0.0	0.0	0.0	1.3	0.0	4.5	0.0	6.8
29	3.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	16.4
30	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3	1.6	10.9
31	0.0		0.0		0.0		0.0	0.0		7.2		2.3

Data Curah Hujan Stasiun Terong

Tahun 1997

Tanggal	Bulan											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sep	Okt	Nop	Des
1	3.9	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	12	0	0	0	0	0	0	0	0	0	0
4	0	0	40	0	0	0	0	0	0	0	0	0
5	1.9	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	3.8	0	0	0	0	0	0	0	0	0	0.6	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0.6	8	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	1.6	0
12	0	0	0	0	0	0	0	0	0	0	0	3.7
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	2.5	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	1.3	0	0	0	0	0	0	0	0	0	0
18	4	8	0	2	0	0	0	0	0	0	0	0
19	4	0	0	0	0	0	0	0	0	0	3.3	0
20	3	0	0	0	0	0	0	0	0	0	0	0
21	0	8.1	0	2.5	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	4	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	2.6	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	1.4	0	0	0	0	0	0	0	0	0	0
28	0	20	0	0	0	0	0	0	0	0	0	6.7
29	0		0	0	0	0	0	0	0	0	2	0
30	0		0	0	0	0	0	0	0	0	5	5
31	0		0		0		0	0		0		0

Data Curah Hujan Stasiun Terong

Tahun 1998

Tanggal	Bulan											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sep	Okt	Nop	Des
1	0	8.6	12	27	13	0	0	5	0	12.5	0	0
2	11.3	11.4	8	0	0	0	10	0	0	0	25	0
3	5	10	0	12	11	9	8	0	0	0	10	0
4	0	0	0	18	0	10	0	37	0	0	0	24
5	13	0	10	0	8	0	12	0	0	0	27	0
6	0	4.6	40	10	0	0	14	0	0	80	23	0
7	10.7	0	20	0	0	0	0	38	0	0	0	18
8	0	6.4	30	0	9	0	0	0	0	0	8	13
9	0	9	0	8	0	0	0	0	0	0	0	0
10	0	36	9	0	8	0	0	0	0	0	0	0
11	0	0	30	0	0	0	7	0	0	12	10	0
12	0	0	0	0	0	0	23	0	0	0	0	6.4
13	0	0	12	12	0	0	14	0	0	0	0	0
14	0	12	8	0	0	8	0	0	0	0	0	0
15	0	0	3	0	0	32	0	0	0	0	21	0
16	0	0	0	9	0	40	0	0	0	0	0	13.8
17	5	15	3	0	0	0	0	0	0	40	0	0
18	0	23	6	17	0	0	0	0	0	0	15	21
19	5	0	0	0	7	9	0	0	0	13	28	0
20	5.7	28	11	0	0	8	0	0	0	61	0	0
21	0	9	42	0	0	10	45	15	0	13	0	59.8
22	0	13	0	21	0	7	0	10	0	0	0	0
23	0	16	0	0	0	11	0	0	0	0	0	12.5
24	0	0	57	0	0	0	0	0	0	17	0	18.6
25	0	0	0	18	18	0	12	0	0	19	0	0
26	0	0	43	0	12	0	10	0	15.9	21	0	0
27	5.5	0	0	15	0	0	0	0	10	0	23	0
28	4.5	0	0	14	0	0	0	0	0	25	16	27.9
29	6.1		0	0	0	0	8	0	0	0	9	0
30	10		49	0	0	15	0	0	0	0	0	35
31	0		0		0		0	0		0		0

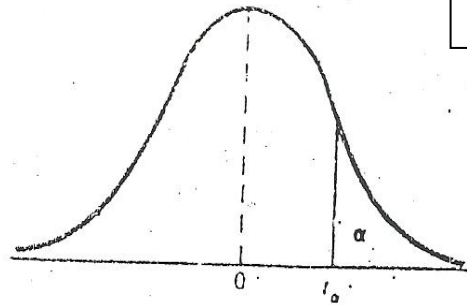
Tahun 1999

Tanggal	Bulan											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sep	Okt	Nop	Des
1	63	4.4	0	18	8.6	0	0	0	0.0	0.0	0	1.8
2	38	4.8	0	11	17.1	0	0	0	0.0	0.0	2.4	0
3	29	21.2	13	8	3.7	0	0	0	0.0	0.0	5	1.5
4	12	17.5	20	0	1.6	0	0	0	0.0	0.0	7	0
5	13	24.1	19	0	0.4	0	0	0	0.0	0.0	0	0
6	10	1.1	0	16	0.0	0	0	0	0.0	0.0	5	0
7	0	0.0	27	0	10.5	0	0	0	0.0	0.0	0	0
8	0	7.9	0	0	4.7	0	0	0	0.0	0.0	0	1.9
9	0	5.3	28	0	0.2	0	0	0	0.0	0.0	0	0
10	27	1.1	16	12	0.0	0	0	0	0.0	0.0	0	1.7
11	0	0.0	13	0	19.1	0	0	0	0.0	0.0	0	2.5
12	0	20.7	27	0	7.9	0	0	0	0.0	6.6	0	0
13	25	2.8	0	0	8.4	0	0	0	0.0	0.2	0	0
14	0	9.0	28	0	0.0	0	0	0	0.0	11.0	5	1.8
15	0	3.4	38	0	4.3	0	0	0	0.0	11.5	0	1.9
16	13	1.8	0	0	0.0	0	0	0	0.0	9.3	5	0
17	23	12.8	0	18	0.0	0	0	0	0.0	0.0	0	1.7
18	0	6.6	16	27	0.0	0	0	0	0.0	0.0	0	0
19	19	14.0	0	0	0.0	0	0	0	0.0	0.0	0	0
20	0	20.9	13	0	0.0	0	0	0	0.0	0.0	0	2.3
21	28	7.6	13	11.5	0.0	0	0	0	0.0	2.6	0	2
22	0	4.7	9	0	0.0	0	0	0	0.0	2.4	6	0
23	0	27.1	18	0	0.0	0	0	0	0.0	0.0	0	0
24	17	5.0	0	0	0.0	0	0	0	0.0	0.0	0	0
25	0	1.7	0	0	0.0	0	0	0	0.0	0.0	0	1.7
26	0	31.3	13	0	0.0	0	0	0	4.8	13.1	0	0
27	32	30.0	19	0	0.0	0	0	0	0.2	14.1	0	0
28	0	15.8	0	0	0.0	0	0	0	0.0	8.9	2.3	3.5
29	0		0	0	0.0	0	0	0	0.0	25.3	0	0
30	21		17	13	0.0	0	0	0	0.0	0.4	0	1.3
31	0		0		0.0		0	0		6.7		0

Data Curah Hujan Stasiun Terong

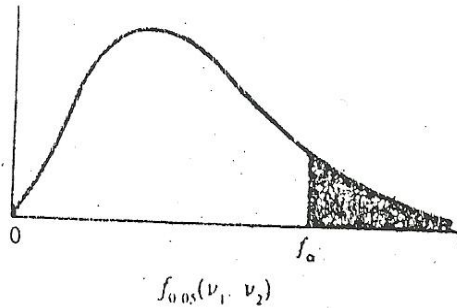
Tahun 2000

Tanggal	Bulan											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sep	Okt	Nop	Des
1	0	0	0	0	0	0	0	0	0	0	0	0
2	3.7	2	0	0	0	0	0	0	0	0	0	0
3	2.3	1	3.7	0	0	0	0	0	0	0	0	0
4	2.9	3	2.3	0	0	0	0	0	0	0	1.8	0
5	1.7	2	2.9	0	0	0	0	0	0	0	0	0
6	1.9	0	1.7	0	0	0	0	0	0	0	2	0
7	0	0	1.9	0	0	0	0	0	0	0	2	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	2	0	0	5	0	0	0	0	0	0	0
10	0	0	0	0	0	1.5	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	1	0
12	0	1	0	0	0	0	0	0	0	0	0	0
13	0	3	0	0.7	0	1.3	0	0	0	0	0	0
14	0	0	0	0	2	0	0	0	0	0	0	0
15	0	0	0	2	0	1.3	0	0	0	0	3	0
16	0	2.3	0	3	0	0	0	0	0	2.8	0	0
17	0	0.8	0	0	4	0	0	0	0	0	0	0
18	0	1	0	0	0	0	0	0	0	0	0	0
19	0	0.9	0	0	0	0	0	0	0	0	1.3	0
20	30	3	30	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	40	2	40	0	0	0	0	0	0	0	0	0
23	20	3	20	0	0	0	0	0	0	0	0	0
24	0	0.6	0	0	0	0	0	0	0	1	0	0
25	0	1.5	0	2	0	0	0	0	0	0	5	0
26	60	0	0	0	0	0	0	0	0	0	0	0
27	60	0	60	0	0	0	0	0	0	1.4	3	0
28	30	0	30	0.9	0	0	0	0	0	1	0	2.3
29	30	0	30	2	0	0	0	0	0	0	2	0
30	0		0	0.5	0	0	0	0	0	0	1	1
31	0		0		0	0	-	0		0		0



ν	α				
	0.10	0.05	0.025	0.01	0.005
1	3.078	6.314	12.706	31.821	63.657
2	1.886	2.920	4.303	6.965	9.925
3	1.633	2.353	3.182	4.541	5.841
4	1.533	2.132	2.776	3.747	4.604
5	1.476	2.015	2.571	3.365	4.032
6	1.440	1.943	2.447	3.143	3.707
7	1.415	1.895	2.365	2.998	3.499
8	1.397	1.860	2.306	2.896	3.355
9	1.383	1.833	2.262	2.821	3.250
10	1.372	1.812	2.228	2.764	3.169
11	1.363	1.796	2.201	2.718	3.106
12	1.356	1.782	2.179	2.681	3.055
13	1.350	1.771	2.160	2.650	3.012
14	1.345	1.761	2.145	2.624	2.977
15	1.341	1.753	2.131	2.602	2.947
16	1.337	1.746	2.120	2.583	2.921
17	1.333	1.740	2.110	2.567	2.898
18	1.330	1.734	2.101	2.552	2.878
19	1.328	1.729	2.093	2.539	2.861
20	1.325	1.725	2.086	2.528	2.845
21	1.323	1.721	2.080	2.518	2.831
22	1.321	1.717	2.074	2.508	2.819
23	1.319	1.714	2.069	2.500	2.807
24	1.318	1.711	2.064	2.492	2.797
25	1.316	1.708	2.060	2.485	2.787
26	1.315	1.706	2.056	2.479	2.779
27	1.314	1.703	2.052	2.473	2.771
28	1.313	1.701	2.048	2.467	2.763
29	1.311	1.699	2.045	2.462	2.756
inf.	1.282	1.645	1.960	2.326	2.576

*Tabel diambil dari Tabel IV R. A. Fisher, *Statistical Methods for Research Workers*. Oliver & Boyd Ltd., Edinburgh, dengan izin pengarang dan penerbit.



v_2	v_1								
	1	2	3	4	5	6	7	8	9
1	161.4	199.5	215.7	224.6	230.2	234.0	236.8	238.9	240.5
2	18.51	19.00	19.16	19.25	19.30	19.33	19.35	19.37	19.38
3	10.13	9.55	9.28	9.12	9.01	8.94	8.89	8.85	8.81
4	7.71	6.94	6.59	6.39	6.26	6.16	6.09	6.04	6.00
5	6.61	5.79	5.41	5.19	5.05	4.95	4.88	4.82	4.77
6	5.99	5.14	4.76	4.53	4.39	4.28	4.21	4.15	4.10
7	5.59	4.74	4.35	4.12	3.97	3.87	3.79	3.73	3.68
8	5.32	4.46	4.07	3.84	3.69	3.58	3.50	3.44	3.39
9	5.12	4.26	3.86	3.63	3.48	3.37	3.29	3.23	3.18
10	4.96	4.10	3.71	3.48	3.33	3.22	3.14	3.07	3.02
11	4.84	3.98	3.59	3.36	3.20	3.09	3.01	2.95	2.90
12	4.75	3.89	3.49	3.26	3.11	3.00	2.91	2.85	2.80
13	4.67	3.81	3.41	3.18	3.03	2.92	2.83	2.77	2.71
14	4.60	3.74	3.34	3.11	2.96	2.85	2.76	2.70	2.65
15	4.54	3.68	3.29	3.06	2.90	2.79	2.71	2.64	2.59
16	4.49	3.63	3.24	3.01	2.85	2.74	2.66	2.59	2.54
17	4.45	3.59	3.20	2.96	2.81	2.70	2.61	2.55	2.49
18	4.41	3.55	3.16	2.93	2.77	2.66	2.58	2.51	2.46
19	4.38	3.52	3.13	2.90	2.74	2.63	2.54	2.48	2.42
20	4.35	3.49	3.10	2.87	2.71	2.60	2.51	2.45	2.39
21	4.32	3.47	3.07	2.84	2.68	2.57	2.49	2.42	2.37
22	4.30	3.44	3.05	2.82	2.66	2.55	2.46	2.40	2.34
23	4.28	3.42	3.03	2.80	2.64	2.53	2.44	2.37	2.32
24	4.26	3.40	3.01	2.78	2.62	2.51	2.42	2.36	2.30
25	4.24	3.39	2.99	2.76	2.60	2.49	2.40	2.34	2.28
26	4.23	3.37	2.98	2.74	2.59	2.47	2.39	2.32	2.27
27	4.21	3.35	2.96	2.73	2.57	2.46	2.37	2.31	2.25
28	4.20	3.34	2.95	2.71	2.56	2.45	2.36	2.29	2.24
29	4.18	3.33	2.93	2.70	2.55	2.43	2.35	2.28	2.22
30	4.17	3.32	2.92	2.69	2.53	2.42	2.33	2.27	2.21
40	4.08	3.23	2.84	2.61	2.45	2.34	2.25	2.18	2.12
60	4.00	3.15	2.76	2.53	2.37	2.25	2.17	2.10	2.04
120	3.92	3.07	2.68	2.45	2.29	2.17	2.09	2.02	1.96
∞	3.84	3.00	2.60	2.37	2.21	2.10	2.01	1.94	1.88

Nilai Kritik Sebaran F
 $f_{0.05}(\nu_1, \nu_2)$

Nilai Kritik Sebaran F

ν_2	ν_1									
	10	12	15	20	24	30	40	60	120	∞
1	241.9	243.9	245.9	248.0	249.1	250.1	251.1	252.2	253.3	254.3
2	19.40	19.41	19.43	19.45	19.45	19.46	19.47	19.48	19.49	19.50
3	8.79	8.74	8.70	8.66	8.64	8.62	8.59	8.57	8.55	8.53
4	5.96	5.91	5.86	5.80	5.77	5.75	5.72	5.69	5.66	5.63
5	4.74	4.68	4.62	4.56	4.53	4.50	4.46	4.43	4.40	4.36
6	4.06	4.00	3.94	3.87	3.84	3.81	3.77	3.74	3.70	3.67
7	3.64	3.57	3.51	3.44	3.41	3.38	3.34	3.30	3.27	3.23
8	3.35	3.28	3.22	3.15	3.12	3.08	3.04	3.01	2.97	2.93
9	3.14	3.07	3.01	2.94	2.90	2.86	2.83	2.79	2.75	2.71
10	2.98	2.91	2.85	2.77	2.74	2.70	2.66	2.62	2.58	2.54
11	2.85	2.79	2.72	2.65	2.61	2.57	2.53	2.49	2.45	2.40
12	2.75	2.69	2.62	2.54	2.51	2.47	2.43	2.38	2.34	2.30
13	2.67	2.60	2.53	2.46	2.42	2.38	2.34	2.30	2.25	2.21
14	2.60	2.53	2.46	2.39	2.35	2.31	2.27	2.22	2.18	2.13
15	2.54	2.48	2.40	2.33	2.29	2.25	2.20	2.16	2.11	2.07
16	2.49	2.42	2.35	2.28	2.24	2.19	2.15	2.11	2.06	2.01
17	2.45	2.38	2.31	2.23	2.19	2.15	2.10	2.06	2.01	1.96
18	2.41	2.34	2.27	2.19	2.15	2.11	2.06	2.02	1.97	1.92
19	2.38	2.31	2.23	2.16	2.11	2.07	2.03	1.98	1.93	1.88
20	2.35	2.28	2.20	2.12	2.08	2.04	1.99	1.95	1.90	1.84
21	2.32	2.25	2.18	2.10	2.05	2.01	1.96	1.92	1.87	1.81
22	2.30	2.22	2.15	2.07	2.03	1.98	1.94	1.89	1.84	1.78
23	2.27	2.20	2.13	2.05	2.01	1.96	1.91	1.86	1.81	1.76
24	2.25	2.18	2.11	2.03	1.98	1.94	1.89	1.84	1.79	1.73
25	2.24	2.16	2.09	2.01	1.96	1.92	1.87	1.82	1.77	1.71
26	2.22	2.15	2.07	1.99	1.95	1.90	1.85	1.80	1.75	1.69
27	2.20	2.13	2.06	1.97	1.93	1.88	1.84	1.79	1.73	1.67
28	2.19	2.12	2.04	1.96	1.91	1.87	1.82	1.77	1.71	1.65
29	2.18	2.10	2.03	1.94	1.90	1.85	1.81	1.75	1.70	1.64
30	2.16	2.09	2.01	1.93	1.89	1.84	1.79	1.74	1.68	1.62
40	2.08	2.00	1.92	1.84	1.79	1.74	1.69	1.64	1.58	1.51
60	1.99	1.92	1.84	1.75	1.70	1.65	1.59	1.53	1.47	1.39
120	1.91	1.83	1.75	1.66	1.61	1.55	1.50	1.43	1.35	1.25
∞	1.83	1.75	1.67	1.57	1.52	1.46	1.39	1.32	1.22	1.00

dk	a derajat kebebasan							
	0,995	0,99	0,975	0,95	0,05	0,025	0,01	0,005
1	0,0000393	0,000157	0,000982	0,00393	3,841	5,024	6,635	7,879
2	0,0100	0,0201	0,0506	0,103	5,991	7,378	9,210	10,597
3	0,0717	0,115	0,216	0,352	7,815	9,348	11,345	12,838
4	0,207	0,297	0,484	0,711	9,488	11,143	13,277	14,860
5	0,412	0,554	0,831	1,145	11,079	12,832	15,086	16,750
6	0,676	0,872	1,237	1,635	12,592	14,449	16,812	18,548
7	0,989	1,239	1,690	2,167	14,067	16,013	18,475	20,278
8	1,344	1,646	2,180	2,733	15,507	17,535	20,090	21,955
9	1,735	2,088	2,700	3,325	16,919	19,023	21,666	23,589
10	2,156	2,558	3,247	3,940	18,307	20,483	23,209	25,188
11	2,603	3,053	3,816	4,575	19,675	21,920	24,725	26,757
12	3,074	3,571	4,404	5,226	21,026	23,337	26,212	28,300
13	3,565	4,107	5,009	5,892	22,362	24,736	27,688	29,819
14	4,075	4,660	5,629	6,571	23,685	26,119	29,141	31,319
15	4,601	5,229	6,262	7,261	24,996	27,488	30,578	32,801
16	5,142	5,812	6,903	7,962	26,296	28,845	32,000	34,267
17	5,697	6,408	7,564	8,672	27,587	30,191	33,409	35,718
18	6,265	7,015	8,231	9,390	28,869	31,526	34,805	37,156
19	6,844	7,633	8,907	10,117	30,144	32,852	36,191	38,582
20	7,434	8,260	9,591	10,851	31,410	34,170	37,566	39,997
21	8,034	8,897	10,283	11,591	32,671	35,479	38,932	41,401
22	8,643	9,542	10,982	12,338	33,924	36,781	40,289	42,796
23	9,260	10,196	11,689	13,091	35,172	38,076	41,638	44,181
24	9,886	10,856	12,401	13,848	36,415	39,364	42,980	45,558
25	10,520	11,524	13,120	14,611	37,652	40,646	44,314	46,928
26	11,160	12,198	13,844	15,379	38,885	41,923	45,642	48,290
27	11,808	12,879	14,573	16,151	40,113	43,194	46,963	49,645
28	12,461	13,565	15,308	16,928	41,337	44,461	48,278	50,993
29	13,121	14,256	16,047	17,708	42,557	45,722	49,588	52,336
30	13,787	14,953	16,791	18,493	43,773	46,979	50,892	53,672

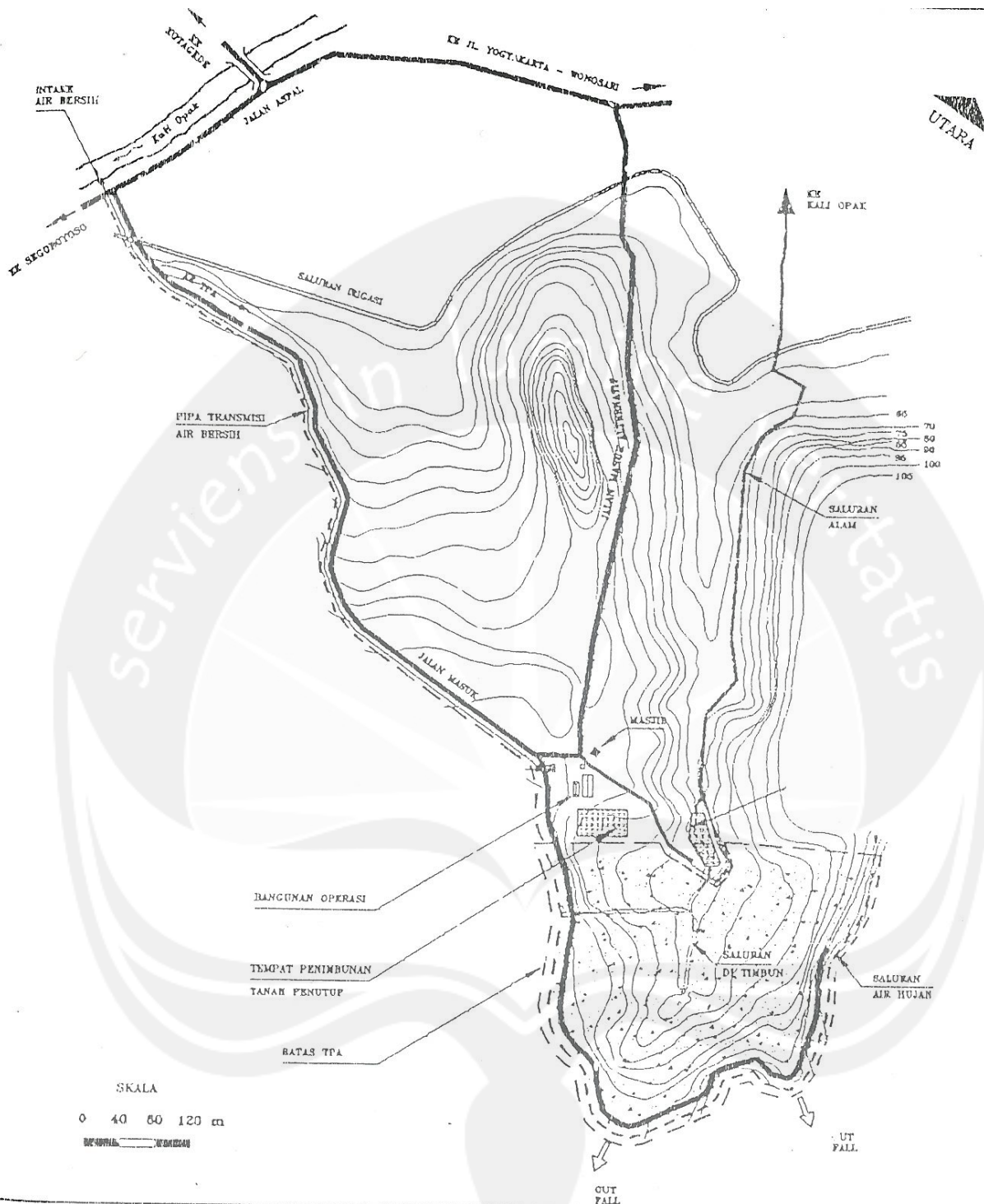
Nilai k Distribusi Log Pearson III

Nilai k Distribusi Log Pearson III

CS	Periode Ulang (tahun)							
	2	5	10	25	50	100	200	1000
	Peluang (%)							
	50	20	10	4	2	1	0,5	0,1
3	-0.36	0.42	1.18	2.278	3.152	4.051	4.97	7.25
2.5	-0.36	0.518	1.25	2.262	3.048	3.845	4.652	6.6
2.2	-0.33	0.574	1.284	2.24	2.97	3.705	4.444	6.2
2	-0.307	0.609	1.302	2.219	2.91	3.605	4.298	5.91
1.8	-0.282	0.643	1.318	2.193	2.848	3.499	4.147	5.66
1.6	-0.254	0.675	1.329	2.163	2.78	3.388	3.99	5.39
1.4	-0.225	0.705	1.337	2.128	2.706	3.271	3.828	5.11
1.2	-0.195	0.732	1.34	2.087	2.626	3.149	3.661	4.82
1	-0.164	0.758	1.34	2.043	2.542	3.022	3.489	4.54
0.9	-0.148	0.769	1.339	2.018	2.498	2.957	3.401	4.395
0.8	-0.132	0.78	1.336	1.998	2.453	2.891	3.312	4.25
0.7	-0.116	0.79	1.333	1.967	2.407	2.824	3.223	4.105
0.6	-0.099	0.8	1.328	1.939	2.359	2.755	3.132	3.96
0.5	-0.083	0.808	1.323	1.91	2.311	2.686	3.041	3.815
0.4	-0.066	0.816	1.317	1.88	2.261	2.615	2.949	3.67
0.3	-0.05	0.824	1.309	1.849	2.211	2.544	2.856	3.525
0.2	-0.033	0.83	1.301	1.818	2.159	2.472	2.763	3.38
0.1	-0.017	0.836	1.292	1.785	2.107	2.4	2.67	3.235
0	0	0.842	1.282	1.751	2.054	2.326	2.576	3.09
-0.1	0.017	0.836	1.27	1.761	2	2.252	2.482	3.95
-0.2	0.033	0.85	1.258	1.68	1.945	2.178	2.388	2.81
-0.3	0.05	0.853	1.245	1.643	1.89	2.104	2.294	2.675
-0.4	0.066	0.855	1.231	1.606	1.834	2.029	2.201	2.54
-0.5	0.083	0.856	1.216	1.567	1.777	1.955	2.108	2.4
-0.6	0.099	0.857	1.2	1.528	1.72	1.88	2.016	2.275
-0.7	0.116	0.857	1.183	1.488	1.663	1.806	1.926	2.15
-0.8	0.132	0.856	1.166	1.448	0.16	1.733	1.837	2.035
-0.9	0.148	0.854	1.147	1.407	1.549	1.66	1.749	1.91
-1	0.164	0.852	1.128	1.366	1.492	1.588	1.664	1.8

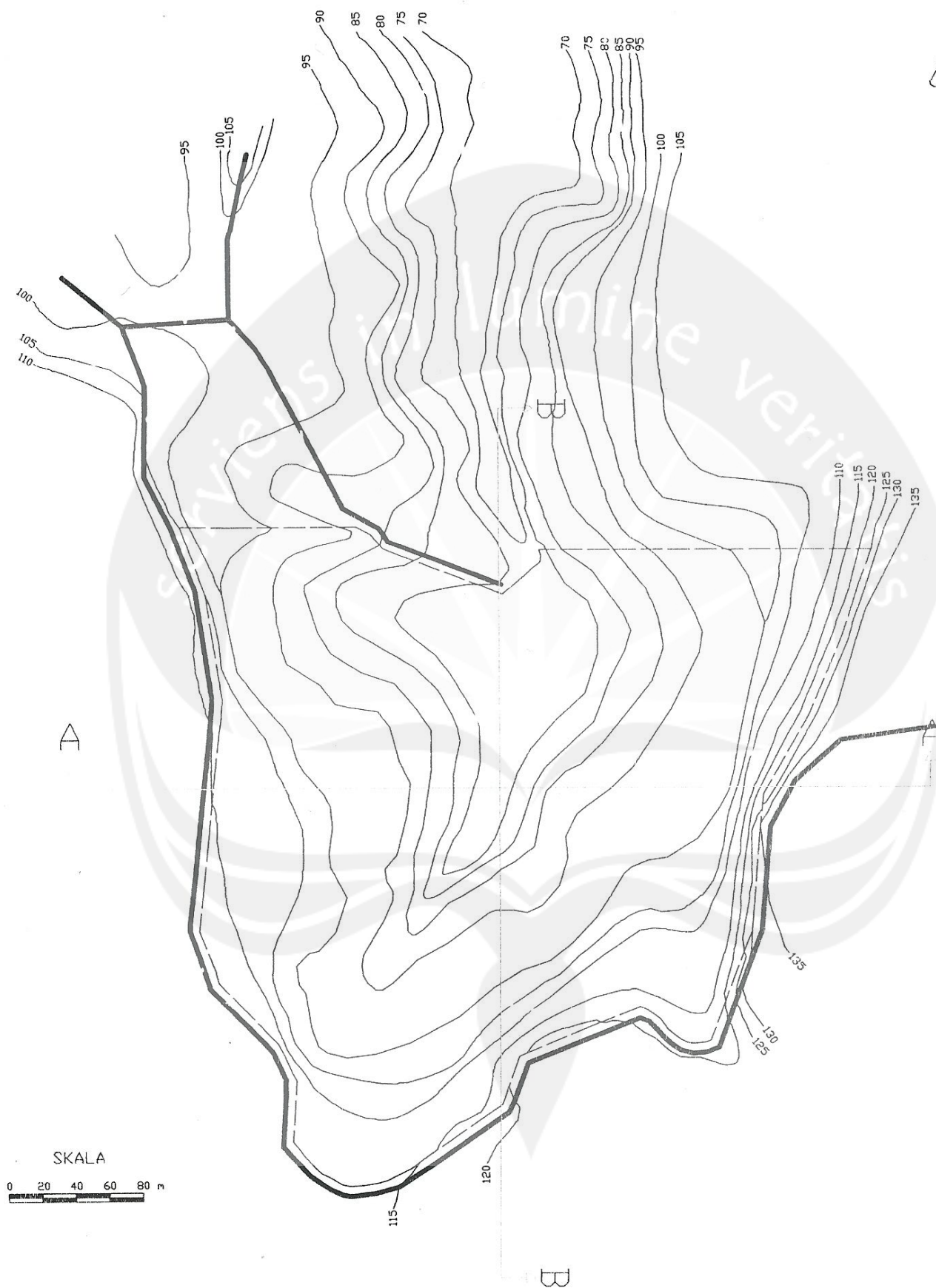
CS	Periode Ulang (tahun)							
	2	5	10	25	50	100	200	1000
	Peluang (%)							
	50	20	10	4	3	1	0,5	0,1
-1.2	0.195	0.844	1.086	1.282	1.379	1.449	1.501	1.625
-1.4	0.225	0.832	1.041	1.198	1.27	1.318	1.351	1.465
-1.6	0.254	0.817	0.994	1.116	1.166	1.197	1.216	1.28
-1.8	0.282	0.799	0.945	1.035	1.069	1.087	1.097	1.13
-2	0.307	0.777	0.895	0.959	0.98	0.99	1.995	1
-2.2	0.33	0.752	0.844	0.888	0.9	0.905	0.907	0.91
-2.5	0.36	0.711	0.771	0.793	0.798	0.799	0.8	0.802
-3	0.396	0.636	0.66	0.666	0.666	0.667	0.667	0.668s

Lay Out TPA Piyungan



LAY-OUT TPA PIYUNGAN

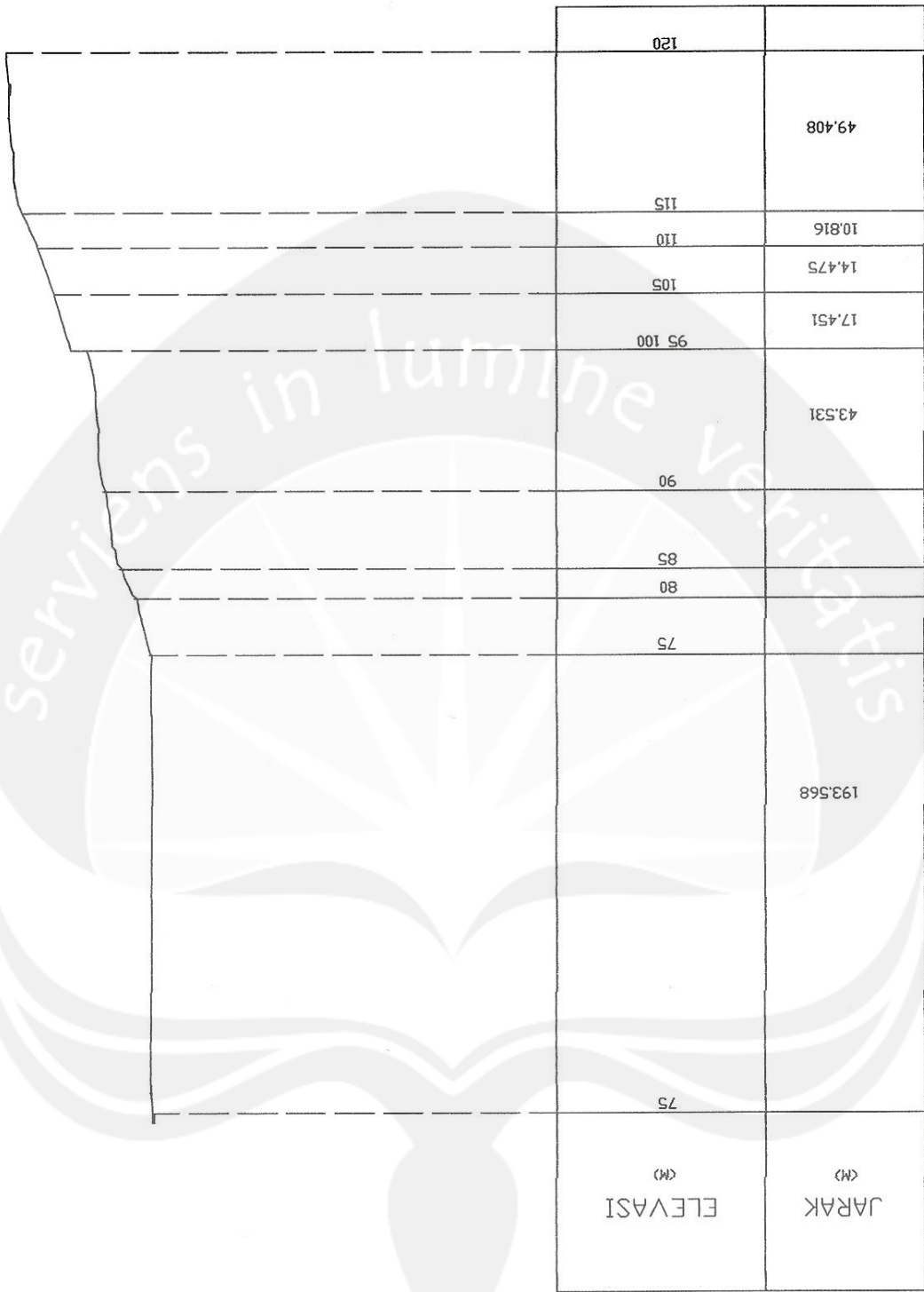
	SALURAN AIR HUJAN DI SEKELILING TPA		AREA PENIMBUNAN SAMPAH (DUMPING SITE)
	SALURAN UTAMA UNTUK LEACHATE		JALAN EXISTING
	SALURAN DI TIMBUN		JALAN EXISTING DI ASPAL SEBAGAI JALAN MASUK
	SALURAN ALAM		GARIS KONTUR

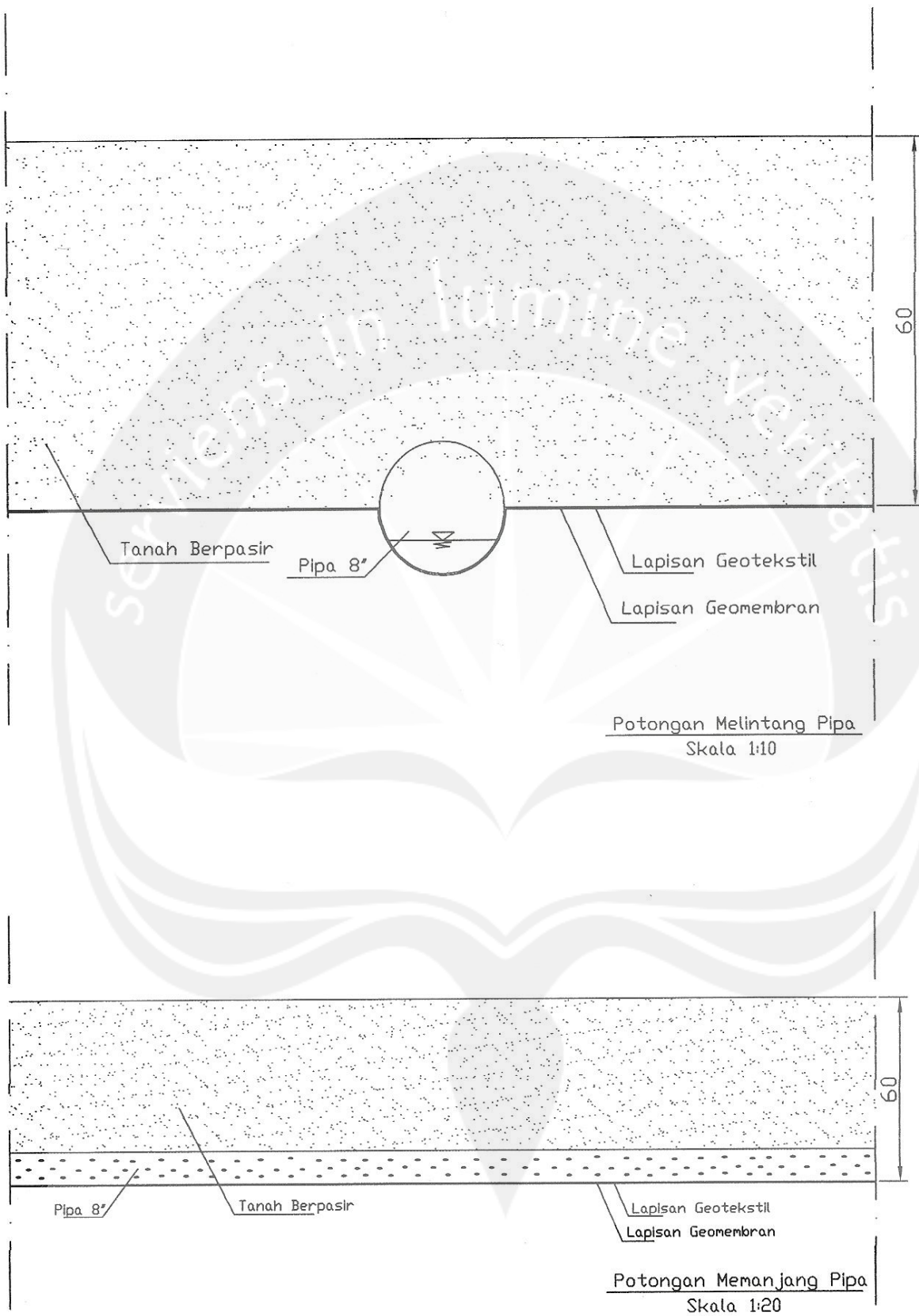


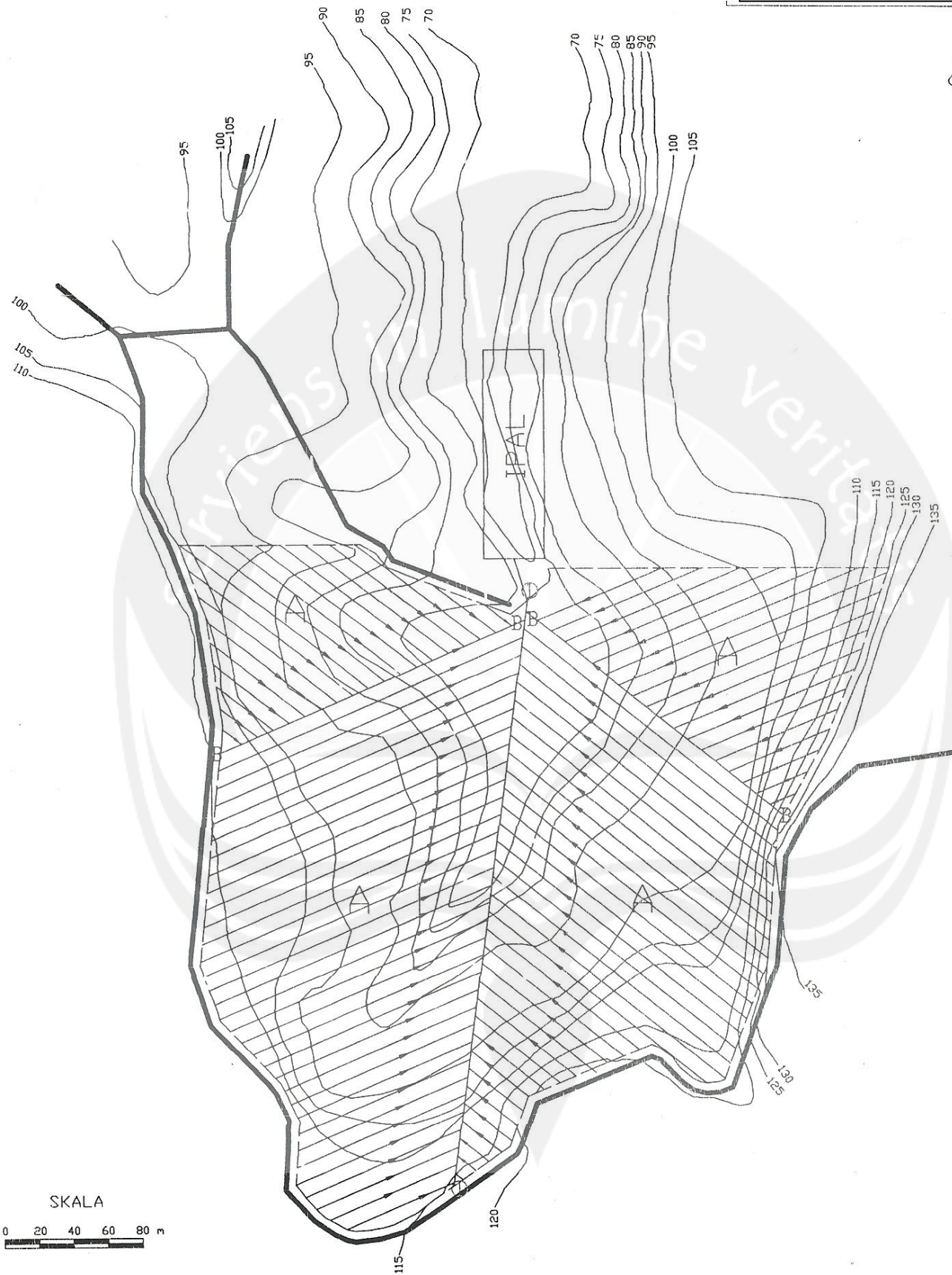
DETAIL LAY-OUT TPA

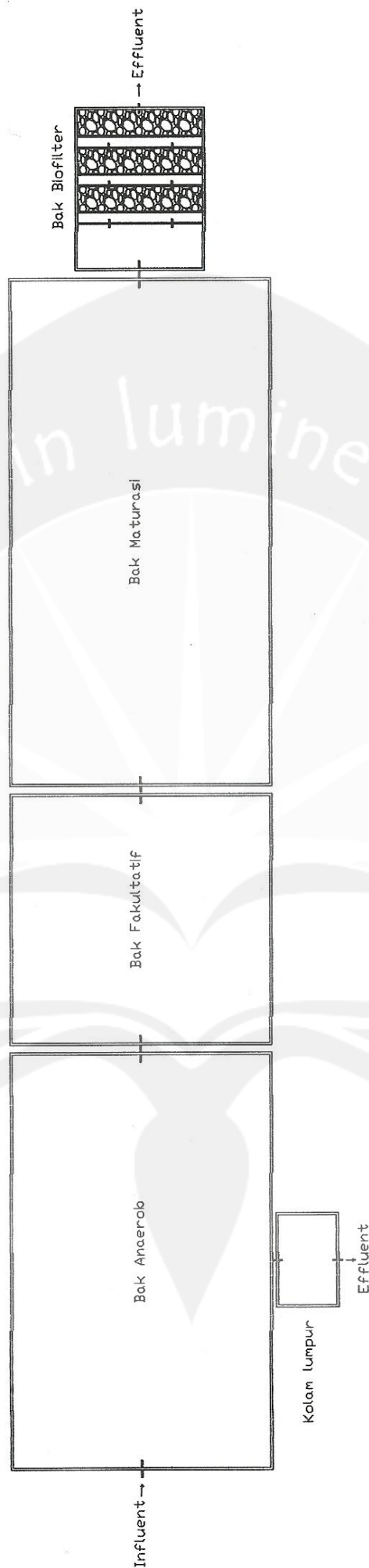


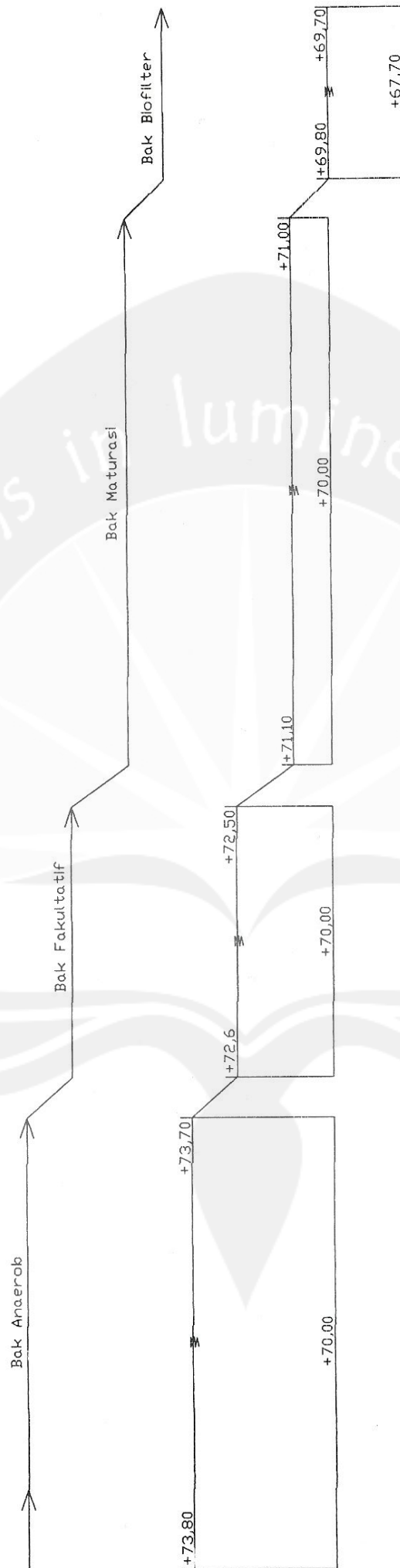
TAMPANG MELINTANG POT.A-A

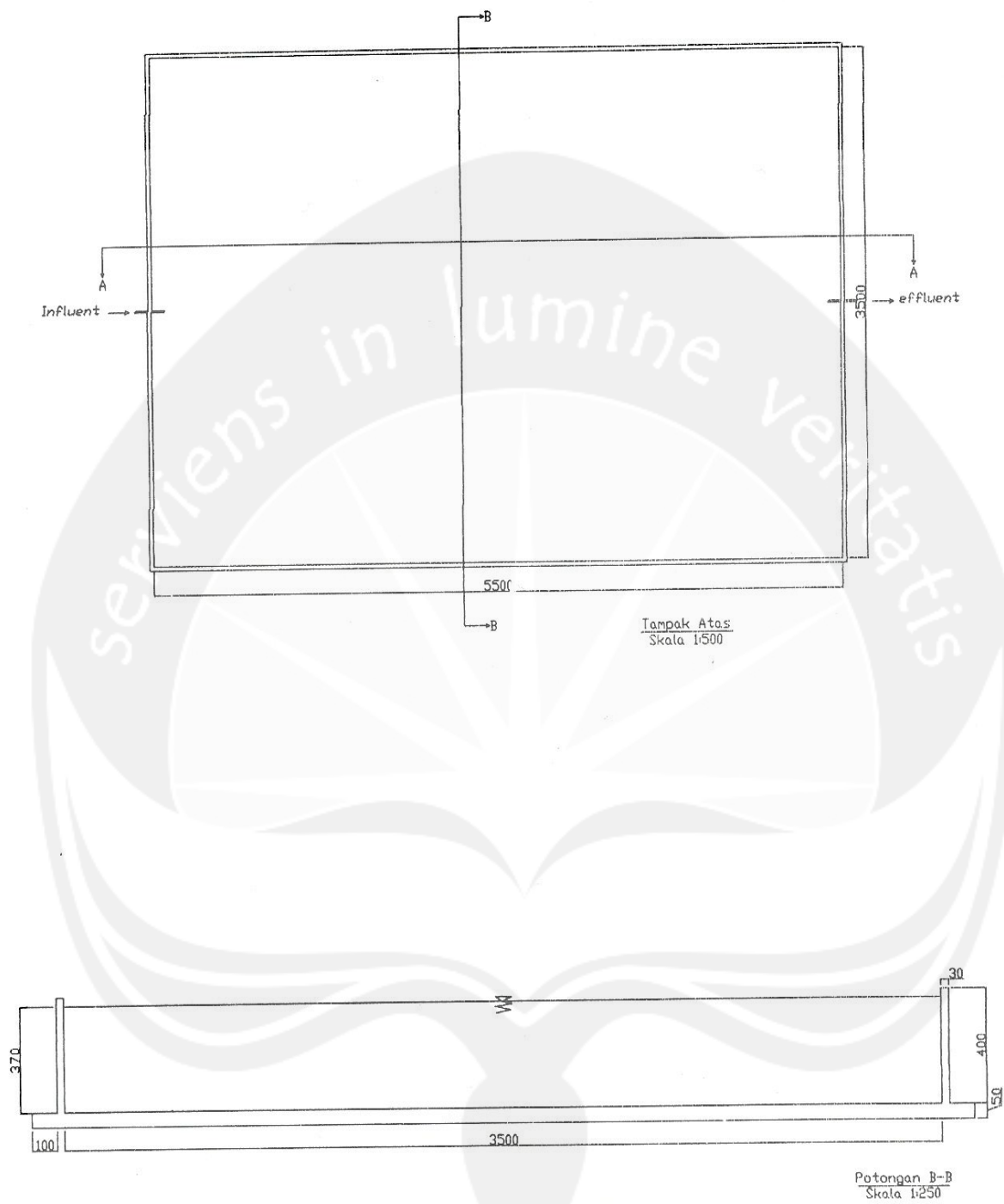


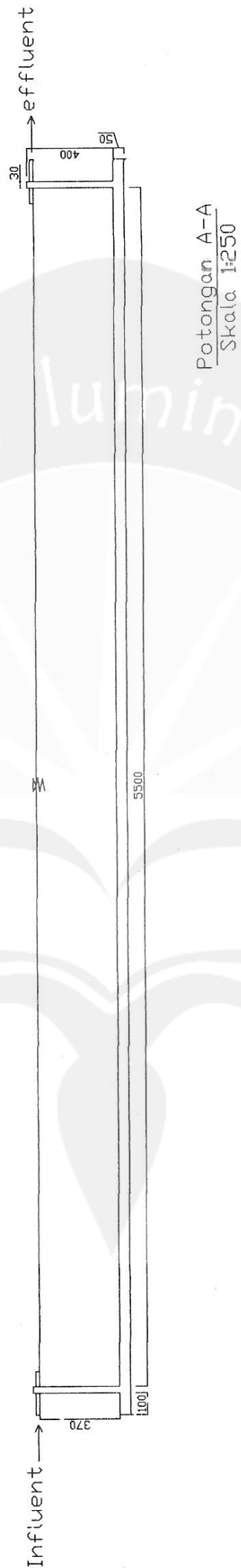


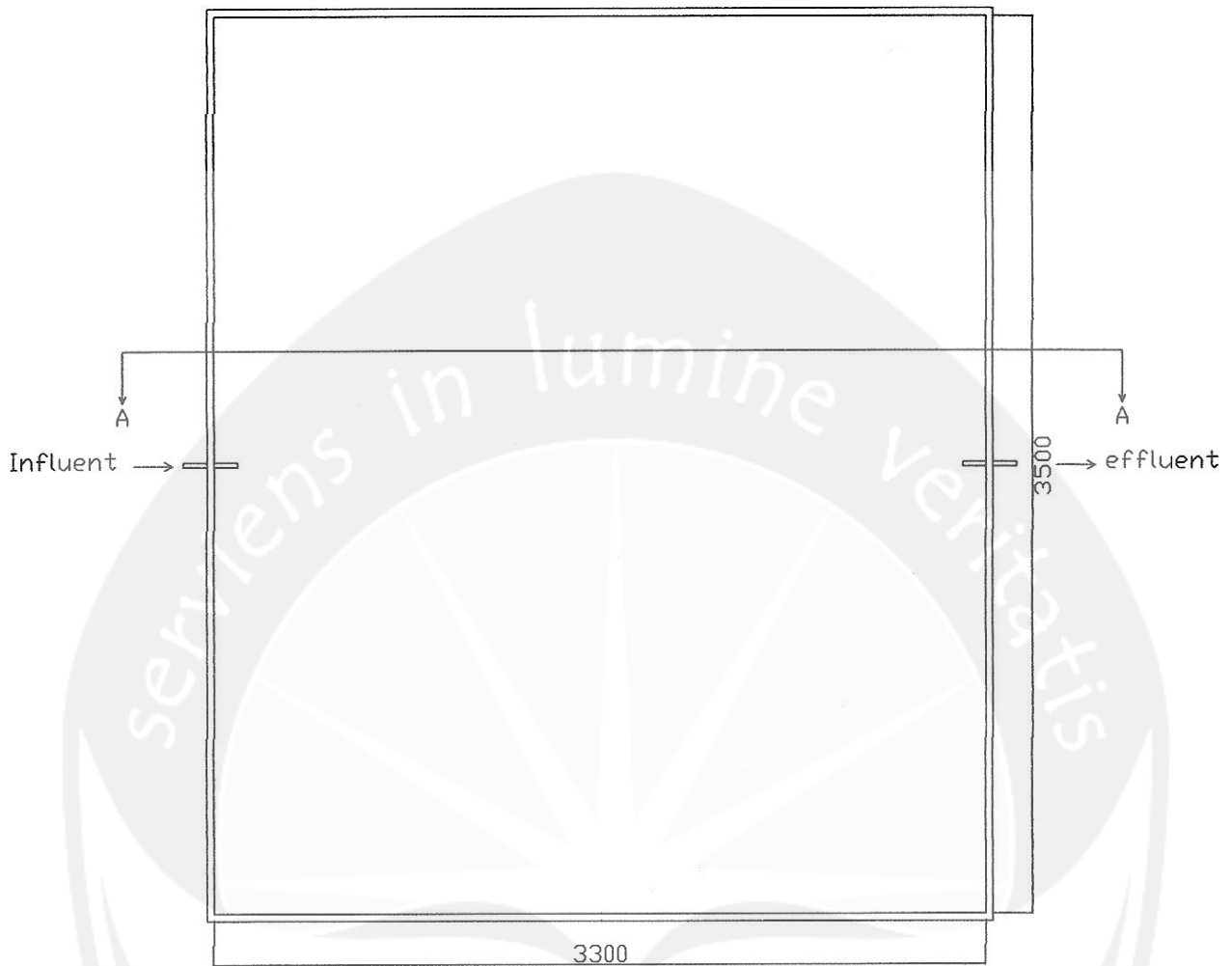
Gambar Situasi IPAL dan
Drainase *Leachate*



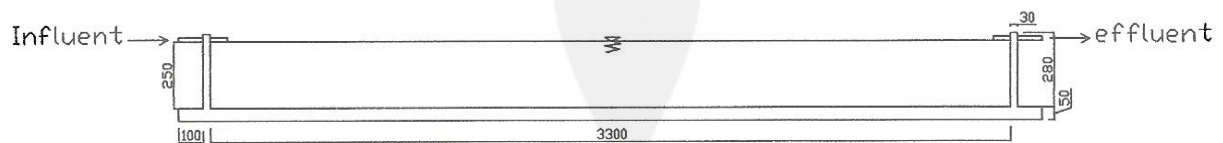




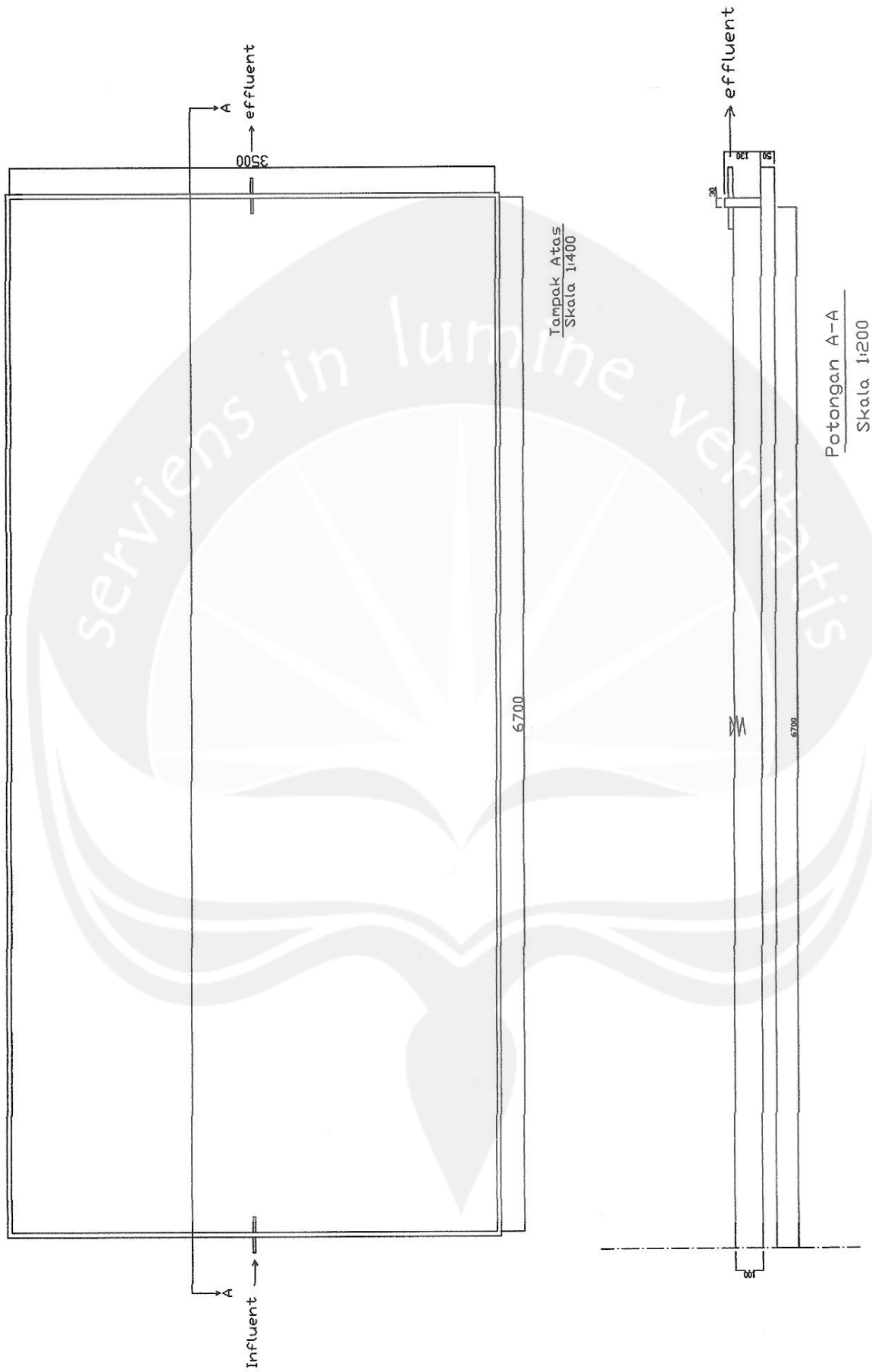


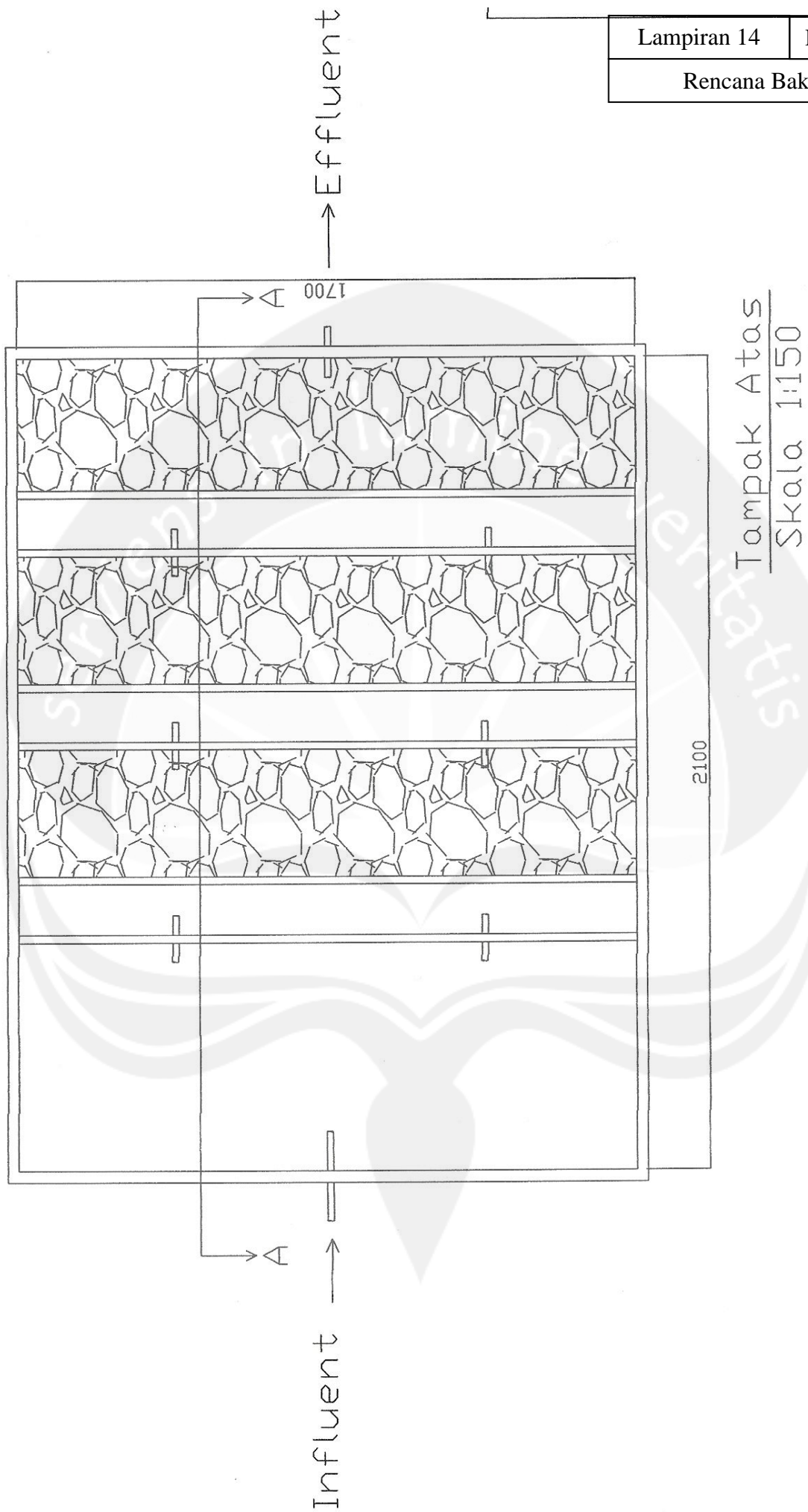


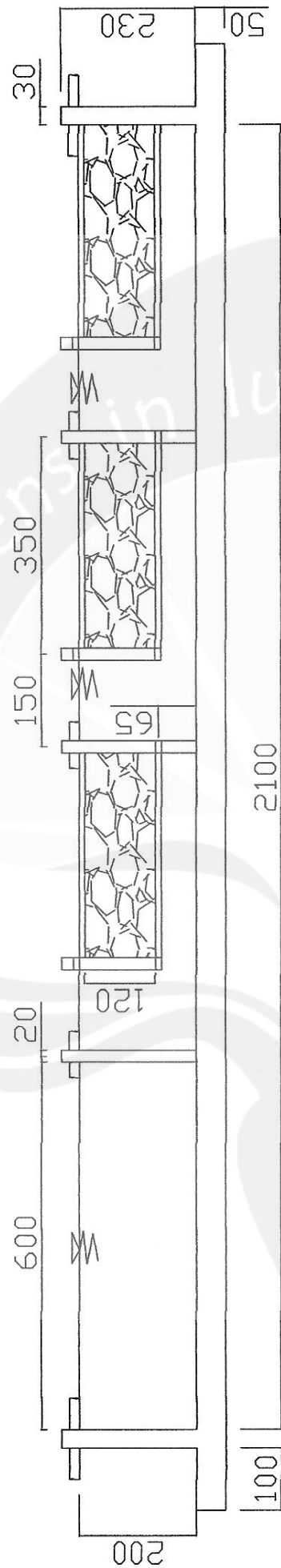
Tampak Atas
Skala 1:300



Potongan A-A
Skala 1:300







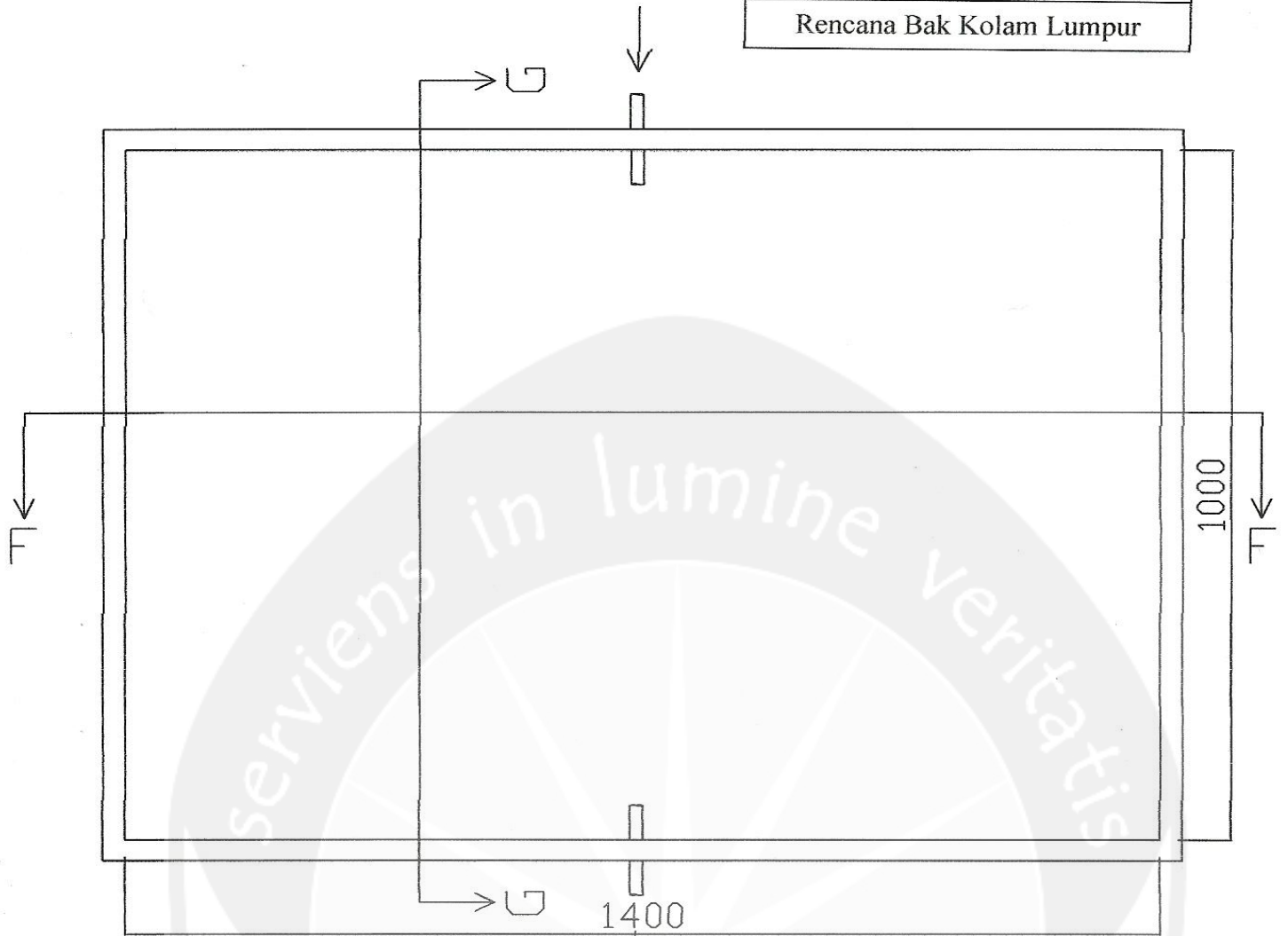
Potongan A-A
Skala 1:100

Influent

Lampiran 15

Halaman 148

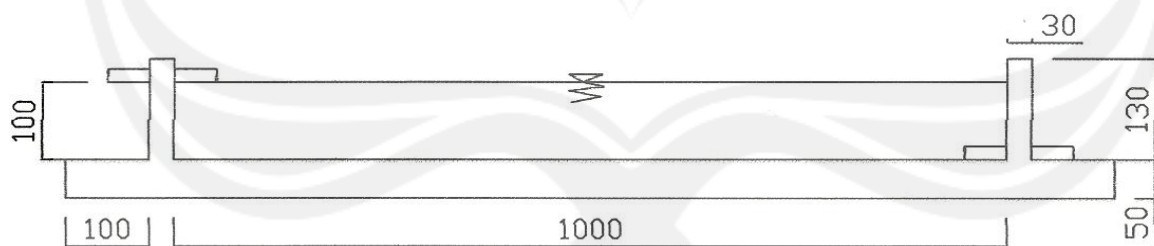
Rencana Bak Kolam Lumpur



Effluent

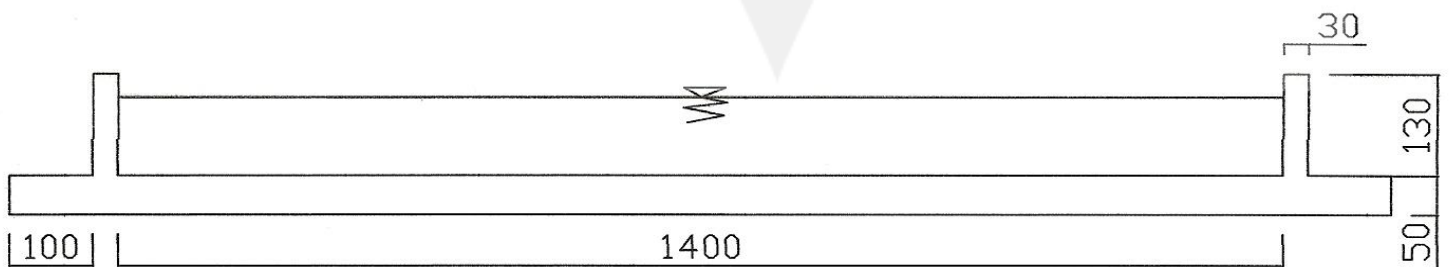
Tampak Atas

Skala 1:100



Potongan G-G

Skala 1:100



Potongan F-F

Skala 1:100